

IN THE CLAIMS

Please amend the claims to read as follows:

Listing of Claims

Claims 1-8 (Canceled).

9. (New) A wireless communication apparatus comprising:
a plurality of antennas;
a first multiplier that multiplies a plurality of signals received through the plurality of antennas by respective weights provided for directional reception;
an adder that adds the signals multiplied by the weights to obtain a received signal;
a demodulator that performs a hard decision of the received signal to obtain hard decision data; and
a controller that controls the weights,
wherein the controller switches between updating and not updating the weights depending on a reliability of the hard decision data.

10. (New) The wireless communication apparatus of claim 9, further comprising:

a determiner that finds a likelihood of the hard decision data and determines the reliability of the hard decision data based on a result of a comparison of the likelihood to a threshold,

wherein the controller switches between updating and not updating the weights depending on the reliability determined by the determiner.

11. (New) The wireless communication apparatus of claim 10, wherein the determiner employs different thresholds, depending on the modulation scheme of the received signal, to perform the comparison.

12. (New) The wireless communication apparatus of claim 9, further comprising:

a determiner that finds a received power of the received signal and determines the reliability of the hard decision data based on a result of a comparison of the received power to a threshold,

wherein the controller switches between updating and not updating the weights depending on the reliability determined by the determiner.

13. (New) The wireless communication apparatus of claim 12, wherein the determiner employs different thresholds, depending on the modulation scheme of the received signal, to perform the comparison.

14. (New) The wireless communication apparatus of claim 9, further comprising:

a second multiplier that multiplies a difference, between the received signal and a reference signal found from the hard decision data, by a coefficient corresponding to the reliability of the hard decision data,

wherein the controller controls the weights based on the difference multiplied by the coefficient.

15. (New) A radio base station apparatus comprising the wireless communication apparatus of claim 9.

16. (New) A radio mobile station apparatus comprising the wireless communication apparatus of claim 9.

17. (New) A wireless communication method comprising:

(a) multiplying a plurality of signals received through a plurality of antennas by respective weights provided for directional reception;

(b) adding the signals multiplied by the weights to obtain a received signal;

(c) performing a hard decision of the received signal to obtain hard decision data; and

(d) controlling the weights by switching between updating and not updating the weights depending on a reliability of the hard decision data.